

### ABSTRACT

A cylinder head for internal combustion engines, comprising a metallic valve seat ring that is formed by a thermally sprayed homogeneous layer made of a basic Co or Co/Mo alloy. The sum of the Co content and Mo content in the alloy exceeds 50 percent by weight while the Fe content lies below 5 percent by weight. Also disclosed is a method for thermally spraying said valve seat ring by means of an arc wire spraying process with the aid of at least two filler wires and/or composite wires, the essential Co portion in the deposited layer being delivered by the jacket of the filler wire and/or the matrix of the composite wire.